ADVANCED REACTOR, FUEL CYCLE, AND ENERGY PRODUCTS WORKSHOP FOR UNIVERSITIES

Bill Halsey

AFC R&D

Systems Analysis

LLNL

Workshop for Universities Hilton Hotel, Gaithersburg, MD March 20, 2007



Systems Analysis - Area Overall Work Scope

- Develop and apply evaluation tools to formulate, assess, and guide program activities to meet programmatic goals and objectives
- Integrates information from the diverse technology development and R&D efforts, as well as drivers such as policy and law
- Enables examination of a diverse set of scenarios
 - Evaluate off-ramps
 - Evaluate technology alternatives
 - Examine deployment options
 - Understand dynamics
- Used to define the requirements for the development and demonstration of the technologies that are necessary to meet a mission

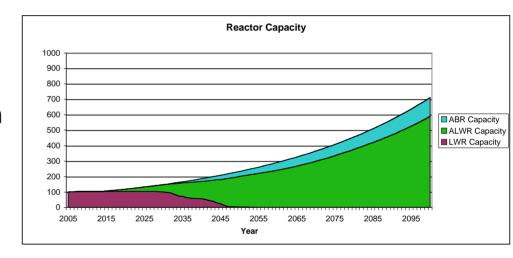
FY06 ACCOMPLISHMENTS

- 2006 Comparison Report to Congress
- Report documenting the recommendation on the thermal recycle option
- Second draft of the Technical Options Report (input to Secretarial recommendation on the need for a second repository)
- Alternatives Study
- Cost Basis Report
- Release of VISION (dynamic simulation model) update

U.S. Department of Energy Office of Nuclear Energy Advanced Fuel Cycle Initiative (AFCI) Comparison Report, FY 2006 Update May 2006

WORK IN PROGRESS FOR FY07

- Systems Status Report to Congress
- GNEP Scenario Studies
 - Deployment System
 - First Facilities
- Externally releasable version of Cost Basis Report
- 2007 Comparison Report
- Update to Technical Options Report
- Externally releasable version of Cost Basis Report
- Integrated Waste
 Management Strategy
- Transportation Studies
- VISION update



PLANS FOR FY08-09

- Input to June 2008 Decision Package
- Scenario Studies
 - Coordination and timing of facilities
 - Requirements for separations efficiencies
 - Repository/waste form requirements
 - Transportation infrastructure needs
 - Industry infrastructure needs
 - Economics
- Global benefits study
- Integrated Waste Management Strategy
- Support development of GNEP business case